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Having described the present invention with reference to the preferred embodiment, it is to be understood that changes can be made to the several parts without departing from the spirit of the invention as recited in the appended claims.

What is claimed is:

1. An apparatus for cutting and applying a thin strip of double-coated, pressure-sensitive adhesive tape to a substrate comprising:

a frame;

a means for supporting a supply of convolutely wound double-coated adhesive tape on said frame, said tape being disposed on a release liner;

severing means for cutting said tape across its width to form strips and not sever the liner so said tape strips remain on said liner after cutting;

an applying arm having an applying tip and an opposite end, said opposite end being mounted on a driven eccentric rotated on said frame about an axis perpendicular to an axis of said arm extending between said tip and said opposite end for movement of said opposite end about a circular path and said arm longitudinally, said applying tip having a surface extending parallel to the axis of rotation of said opposite end for supporting a strip of tape; means associated with said tip applying arm intermediate said tip and said opposite end for oscillating said applying arm about said eccentric resulting in said applying tip moving through a thin-foil shaped biconvex path at a rate momentarily equaling the speed of the substrate;

means for advancing said tape and said liner off a said supply past said severing means and applying tip of said applying arm; and

indexing means for registering a severed strip of tape at the applying tip of the applying arm in position for application to the substrate.

2. The apparatus of claim 1 wherein said severing means is heated blade mounted on an oscillating arm which moves the blade into contact with the tape as it moves past a roller which cooperates with said blade to sever said tape.

3. The apparatus of claim 1 wherein said indexing means comprises a driven tape metering roller which advances the tape in short increments between cuts and an eccentric roller located between said metering roller and said applying arm, said eccentric roller keeping the severed pieces of tape from oscillating about the applying tip.

4. The apparatus of claim 1 wherein said means associated with said applying arm comprises a cam member engaging a cam track extending longitudinally of said applying arm, said cam member being mounted on a driven eccentric rotated on an axis perpendicular to the longitudinal axis of said arm.

5. The apparatus of claim 1 wherein said severing means comprises a blade extending across the width of the tape, said blade being mounted on a pivotal arm to swing toward and away from a support across which the tape is moved.

6. The apparatus of claim 5 wherein said pivotal arm is moved upon movement of an adjustable link between

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said pivotal arm and a driving member, said link comprising a piston having a connecting rod and a housing receiving said piston and forming a chamber on each side of said piston, and a valve for adjusting the air pressure on said piston to adjust the cutting pressure, form an air spring and position the blade in relationship to the support when the knife is out of cutting position.

7. The apparatus of claim 1 wherein said indexing means comprises a driven tape metering roller which advances the tape an amount corresponding to the length of the tape between cuts, and a roller supported on a pin between said metering roller and said applying arm, said pin being positioned eccentric to a driven roller for keeping the severed pieces of tape from oscillating about the applying tip.

8. An apparatus for cutting and applying a thin strip of double-coated, pressure-sensitive adhesive tape to a substrate comprising:

a frame,

a means for supporting a supply of convolutely wound double-coated adhesive tape on said frame, said tape being disposed on a release liner,

severing means including a heated blade mounted on an oscillating arm for cutting said tape across its width to form strips, said oscillating arm moves the blade into contact with the tape as it moves past a roller which cooperates with the blade to sever the tape and not sever the liner so said tape strips remain on said liner after cutting,

an applying arm having an applying tip and an opposite end, said applying tip having a surface extending perpendicular to the longitudinal axis of said applying arm for supporting a strip of tape, means supporting said applying arm for oscillatory movement of said applying tip about said opposite end to move the tape strips into contact with a moving substrate,

means for advancing said tape and said liner off a said supply past said severing means and applying tip of said applying arm, and

indexing means for registering a severed strip of tape at the applying tip of the applying arm in position for application to the substrate.

9. An apparatus according to claim 8 wherein said indexing means comprises a driven tape metering roller which advances the tape in short increments between cuts, an eccentric roller located between said metering roller and said applying arm, and means driving said eccentric roller for keeping the severed pieces of tape from oscillating about the applying tip.

10. An apparatus according to claim 10 wherein said means supporting said applying arm comprises an eccentric wheel rotatable on an axis perpendicular to the longitudinal axis of the applying arm and connected to said opposite end of said applying arm to move the applying arm longitudinally and support means intermediate the applying tip and said opposite end for oscillating said applying arm about the connection to said eccentric wheel affording movement of said applying tip along a biconvex path to apply the tape strips to a moving substrate.

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